



Gulf of Mexico Harmful Algal Bloom Bulletin

22 January 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: January 18, 2007

Conditions Report

A harmful algal bloom has been identified in patches from northern Sarasota to central Collier Counties and north of the Lower Florida Keys in Monroe County. Today, patchy moderate impacts are possible in Sarasota, northern Charlotte, and northern Lee Counties, with patchy high impacts possible in southern Charlotte County, and patchy very low impacts possible in central Collier County. Tuesday through Wednesday, patchy very low impacts are possible in Sarasota, northern Charlotte, and northern Lee Counties, with patchy low impacts possible in southern Charlotte County, and no impacts expected in central Collier County. No impacts are expected in southern Lee and northern Collier Counties through Thursday. On the gulfside Lower Keys patchy moderate impacts are possible on Tuesday and Wednesday, with patchy moderate impacts possible in the off-shore region today through Wednesday.

Analysis

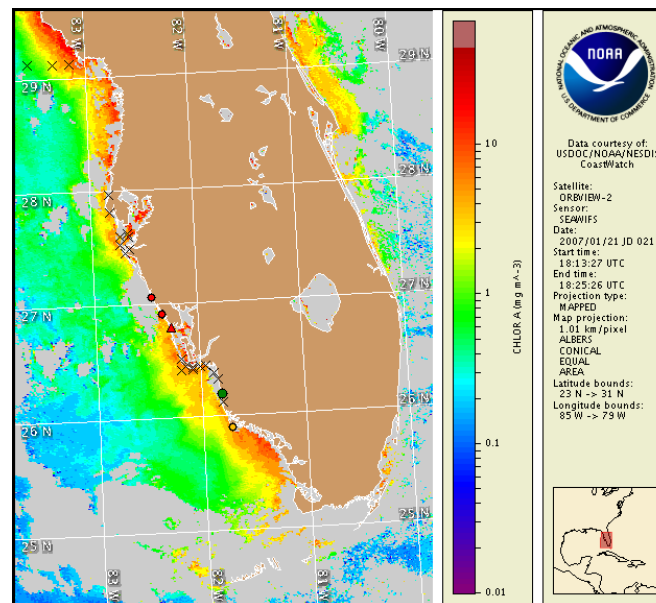
A harmful algal bloom persists from northern Sarasota to central Collier County and north to northwest of the Lower Florida Keys in Monroe County. Recent sampling has confirmed a decrease in *K. brevis* concentrations (from high to low) in portions of southern Sarasota and northern Charlotte County over the past 2 weeks (FWRI, 1/17-18). No *K. brevis* has been identified in southern Lee County and only background concentrations exist in northern Collier County as of 1/17. Additionally, concentrations over the past 10 days have decreased to very low in central Collier County. Chlorophyll patches remain elevated near recently confirmed *K. brevis* locations, including from northern Charlotte County to central Lee County (26°54.1'N 82°22.1'W to 26°33.6'N 82°15.2'W; up to 7 µg/L). Chlorophyll levels also appear elevated south of Cape Romano at 25°51.7'N 81°41.7'W (up to 9 µg/L) and 17nm offshore central Collier County from 26°14.1'N 82°7.8'W to 26°0.6'N 82°7.9'W. Respiratory irritation has been reported over the past few days in Sarasota and northern Lee Counties. Impacts should be minimized beginning on Tuesday with alongshore and offshore wind conditions. South to southwestward transport is possible Tuesday through Thursday.

Recent imagery in the Keys is predominately obscured by clouds; however a small patch of elevated chlorophyll, up to 10 µg/L, is visible northwest of the Lower Keys at 24°43'N 82°8.4'W. Medium concentrations of *K. brevis* were reported at this location by MML on 1/19. Westward transport of *K. brevis* is possible through Wednesday.

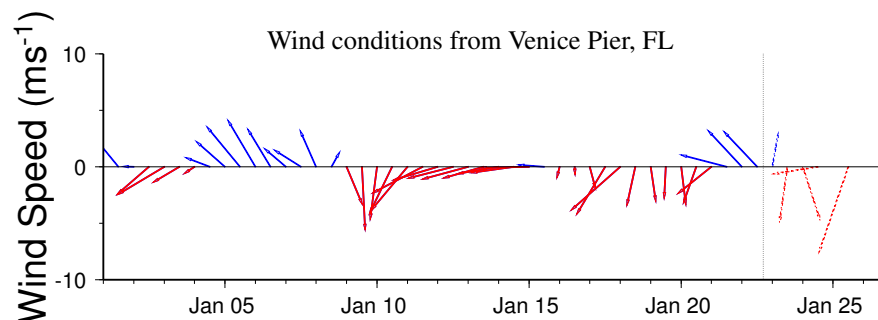
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

~Fisher, Fenstermacher



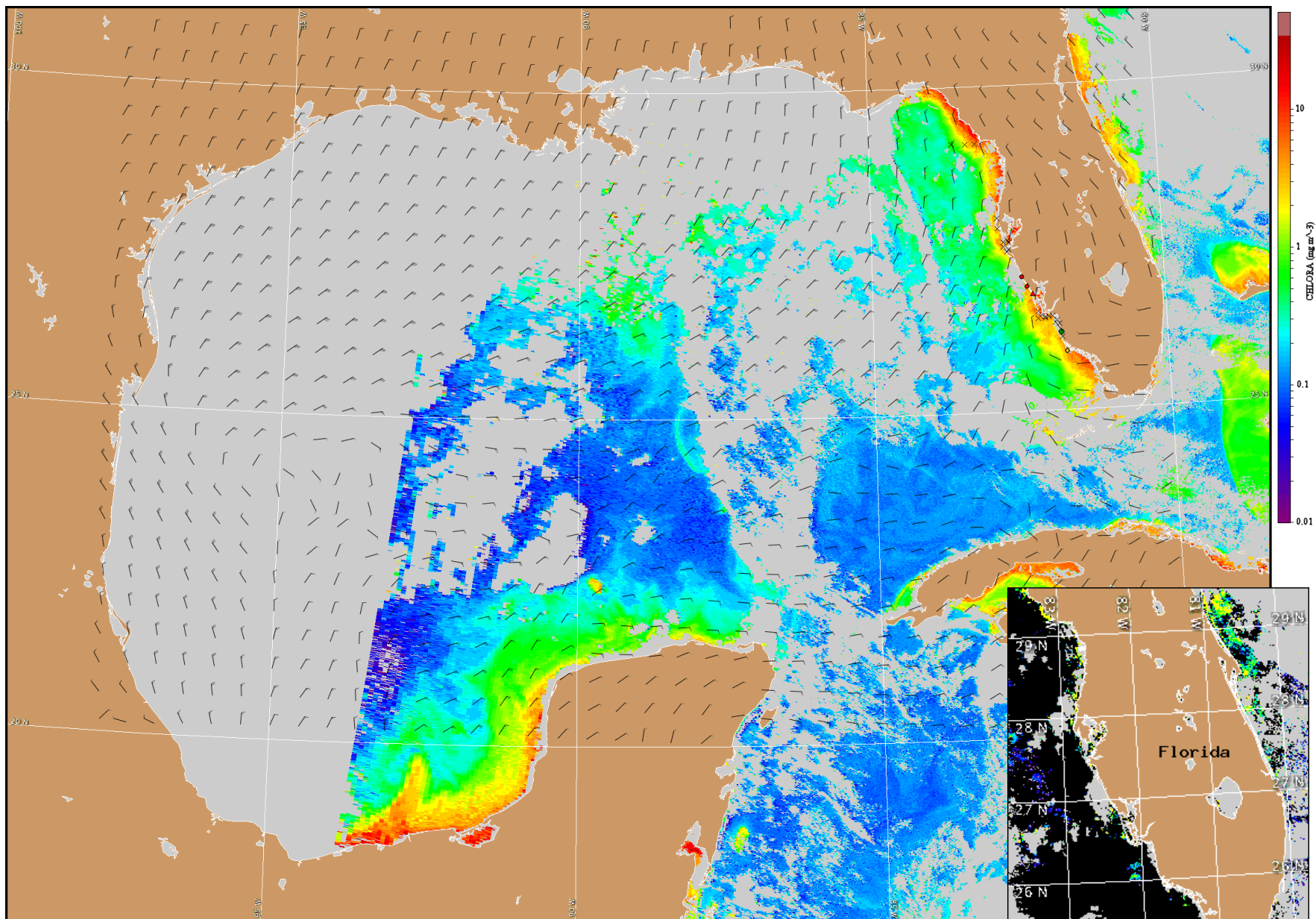
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration categories and corresponding cell count values from Florida Fish and Wildlife Research Institute. For a key to the cell concentration descriptions, visit <http://research.myfwc.com>. Cell concentration sampling data from January 12-18 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



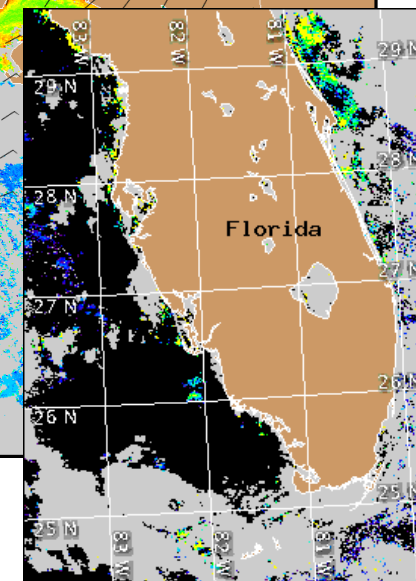
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Southwest winds today (15kts, 8m/s and gusty) turning northwesterly tonight. Northerly winds Tuesday (15kts). Northeasterly winds Wednesday (10kts, 5m/s). Northerly winds Thursday (15kts).

Florida Keys: Southeasterly winds today (10-15kts, 5-8m/s). Variable winds Tuesday becoming northerly to northeasterly (10-15kts). Northeasterly to easterly winds Wednesday (10-15kts). Southwesterly to northwesterly winds Thursday (15kts, 8m/s and gusty).

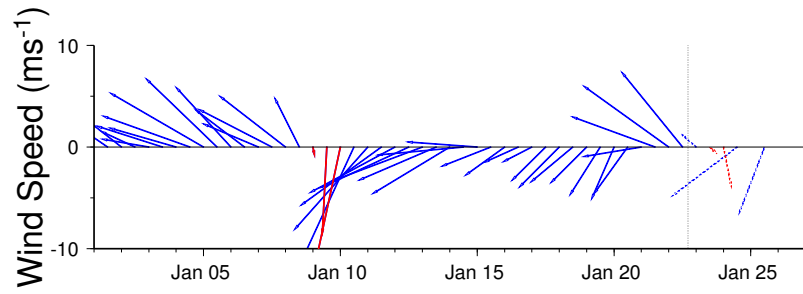


Satellite chlorophyll image and forecast winds for January 23, 2007 12Z with cell concentration sampling data from January 12-18 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Sand Key, FL



Wind conditions from Naples, FL

